



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/939,405 | 08/27/2001 | Kenneth Alan Pieroni | CHMP-102D | 5474 |
| 21272 | 7590 | 11/23/2004 | EXAMINER | |
| MORLAND C FISCHER 2030 MAIN ST SUITE 1050 IRVINE, CA 92614 | | | GARBER, CHARLES D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2856 | |

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/939,405

Applicant(s)

PIERONI ET AL.

Examiner

Charles D. Garber

Art Unit

2856

Am

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-18 and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) 11-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 19-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 29, 31, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westervelet et al. (US Patent 3,872,712) in view of Oswald et al. (US Patent 3,813,922).

Regarding claims 29 and 35, Westervelt discloses a dynamic air flow comparator system that may be used for testing workpieces for leakage. Workpieces may include "transmission housings, power cylinders, parts carrying seals or any of a wide variety of other items" according to Westervelt (Background). Though Westervelt does not

expressly teach testing evaporative emission systems the reference's inclusion of "any of a wide variety of other items" in the context of specific vehicle systems indicates the reference invention may encompass a vehicle evaporative systems (and their problem of leakiness) which was known not only at the time of the instant invention but also at the time of the Westervelt invention.

Westervelt discloses alternatively connecting the workpiece 50 and reject calibration leak 35 (leak tolerance standard) to a pressure source at air supply inlet 36 and to flow sensors 17 and 62. Flow sensor 62 is a visual flow indicator that may be used in conjunction with the automated test (using flow sensor 17) or independently if the user chooses to perform a manual test. The calibration circuit is employed at the end of each test (either automatically or manually) and therefore precedes any subsequent test which anticipates "disconnecting the gas supply line and... gas flow meter from the leak tolerance standard and reconnecting the gas supply line and... gas flow meter to" a workpiece as in the instant invention. Sequencing of the valves 56 and 33 switches supply pressure from the workpiece to the calibrated leaks.

Comparison of the calibration and workpiece leak flow rates is performed either automatically with comparator system 48 or manually using visual flow gauge 62 as an alternative to the red and green lamp signals (column 5 lines 24-26).

Westervelt does not expressly teach the flow rate gauge 62 is a ball gauge.

Oswald discloses an air leak detector including a ball valve 17 for detecting leak flow rates. Oswald teaches "Air flow moves the ball 18 up the frustum 22 a distance proportional to the flow rate, since the clearance between the inner wall of the frustum

Art Unit: 2856

and the ball increases as the ball moves upwardly carried by the air stream against the force of gravity. By utilizing appropriate ball weights and sizes, very low flow rates can be sensed."

It would have been obvious to one having ordinary skill in the art at the time the invention was made use a ball type flow valve utilizing appropriate ball weights and sizes so that very low flow rates (and very small leaks) can be sensed.

As for claim 31, Westervelt uses air (abstract) which is not flammable.

Claims 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westervelet et al. (US Patent 3,872,712) as modified by Oswald et al. (US Patent 3,813,922) and applied to claims 29 or 31 above and further in view of Mieczkowski et al. (US Patent 5,898,108)

Regarding claim 30, the references lack the leak test system connected to a fuel vapor recovery system of a motor vehicle.

Mieczkowski discloses an evaporative emission tester that may be connected to a vehicle emission system as shown in figures 3 and 4. Mieczkowski teaches the system may perform a purge flow test and particularly a pressure test (abstract) to detect leakage in the evaporative recovery system as mandated by the EPA (column 1 lines 41-43, column 2 lines 14-25) in order to ensure against leakage of environmentally harmful fuel vapors.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to test a fuel vapor recovery system of a motor vehicle by

connecting a leak tester in order to ensure against leakage of environmentally harmful fuel vapors.

As for claim 32, the references lack the gas for pressurizing the system is nitrogen. Mieczkowski teaches nitrogen is a suitable gas for pressuring a fuel vapor recovery system of a motor vehicle for leak testing (column 6 lines 60-61 and column 2 lines 14-18). It would have been obvious to one having ordinary skill in the art at the time the invention was made to leak test using nitrogen to pressurize a system under test as nitrogen is a "suitable" gas and is further required by EPA regulations.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Westervelet et al. (US Patent 3,872,712) as modified by Oswald et al. (US Patent 3,813,922) and applied to claims 29 or 31 above and further in view of Adams (US Patent 4,462,249).

The references lack the gas is carbon dioxide.

Adams discloses a leak test device including cylinder 41 providing gas used to pressurize a tank during a leak test. Adams teaches the "gas cylinder preferably contains nitrogen it can also be any other inert gas such as carbon dioxide".

It would have been obvious to one having ordinary skill in the art at the time the invention was made to pressurize a system with either nitrogen or carbon dioxide as both are inert and therefore will not react harmfully with the system or its contents.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Westervelet et al. (US Patent 3,872,712) as modified by Oswald et al. (US Patent

3,813,922) and applied to claims 29 above and further in view of Toback (US Patent 3,822,585).

The references lack the gas supply including a check valve in the supply line.

Toback teaches check valve 50 in line 51 from air source at 54.

This is done typically to maintain pressure if the source is disconnected or to prevent contamination of the source from backflow.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to dispose a check valve in the gas supply line in order to prevent backflow and thereby hold pressure and prevent contamination of the source.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2856

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Garber whose telephone number is (571) 272-2194. The examiner can normally be reached on 6:30 a.m. to 3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdg

A handwritten signature in black ink, appearing to read 'CDG', is located in the lower right quadrant of the page.